CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-3
NPDES NO. CA0028789

ISSUING WASTE DISCHARGE REQUIREMENTS FOR:

LONE STAR INDUSTRIES, INC.
ELIOT PLANT
PLEASANTON, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Lone Star Industries, Inc., hereinafter callled the discharger, by application dated November 13, 1984, has applied for issuance of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger harvests and processes sand and gravel and intermittently discharges decanted wash waters and rising groundwater to Arroyo del Valle from two discharge points and to Shadow Cliffs Reservoir from one discharge point. Groundwater from quarry pits and onsite wells is used to wash clays from the aggregates being processed. Wash water from the primary processing facility is pumped to a settling pond (Pond #4) and recirculated as needed. Pond #4 is decanted to Pond #5 which consists of primarily groundwater seepage and will be the major source of the facility's discharge (to Arroyo del Valle as 001). Washwater from the secondary processing facility is pumped to Ponds #13 and #14 for settling and recirculation. Decanted water and groundwater seepage from Ponds #13 and #14 are pumped via the same pipeline to a second Arroyo del Valle discharge point (002) and to the Shadow Cliffs Reservoir discharge point (003). The discharger has not discharged to the Shadow Cliffs Reservoir in recent years, but may in the future. The average discharge rate is 2.9 mgd and the maximum rate is 5.8 mgd. The discharge locations are: 001-Lat. 37° 39'40", Long. 121° 49'5"; 002-Lat. 37° 39'56", Long. 121° 49'44"; and 003-Lat. 37° 40'4", Long. 121° 49'43".

3. Sewage wastes are disposed of to an onsite septic system.

4. Waste discharge requirements have not previously been issued for the discharge because the discharger has consistently been able to reuse its wash water and rising groundwater. However, due to conditions discussed in proceeding Paragraph 8e, the discharger expects to discharge on a regular basis.

5. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Alameda Creek, Arroyo de la Laguna, Shadow Cliffs Reservoir, Arroyo del Valle, Arroyo Mocho and contiguous waters.

6. The beneficial uses of Alameda Creek, Arroyo de la Laguna, Shadow Cliffs Reservoir, Arroyo Mocho, Arroyo del Valle and contiguous water bodies are:

   Water contact recreation
   Non-contact water recreation
   Wildlife habitat
   Warm fresh water habitat
   Fish migration and spawning
   Industrial service and process supply
   Municipal and domestic supply
   Agricultural supply
   Groundwater supply
   Fresh water replenishment

7. The surface water quality objectives for the Alameda Creek watershed above Niles, including Arroyo del Valle and Arroyo Mocho, are:

Total Dissolved Solids (TDS):	250 mg/l 90 day - arithmetic mean 360 mg/l 90 day - 90th percentile 500 mg/l daily maximum
Chlorides:	60 mg/l 90 day - arithmetic mean 100 mg/l 90 day - 90th percentile 250 mg/l daily maximum

   Wastewater discharges that cause these surface water quality objectives to be exceeded may be allowed if they are part of an overall water-wastewater resource operational program developed by those agencies affected and approved by the Regional Board.

   Waters designated for use as domestic or municipal water supply shall not contain concentrations of chemicals in excess of natural concentration or the limits specified in the California Administrative Code, Title 22, Chapter 15, particularly Tables 2, 3, 6, and 7.

8. The Board's 1975 Basin Plan did not allow any exceptions to the prohibition of discharge to the Alameda Creek watershed above Niles when no natural flow occurs. In accordance with the July 1982 amended Basin Plan, the Board may allow exceptions to the dry weather discharge prohibition when the Board finds that the discharge does not contain characteristics of concern to beneficial uses in Alameda Creek. Furthermore, the Board may allow discharges to Alameda Creek and its tributaries, including Arroyo Mocho and Arroyo del Valle, that may cause surface water quality objectives to be exceeded if the discharge is part of an overall water-wastewater resource operational program developed by those agencies affected and approved by the Regional Board. The following information supports the criteria to provide exceptions to the Basin Plan's dry weather discharge prohibition and shows compliance with surface water quality objectives and beneficial uses:

   a. The discharge contains no sewage-bearing wastes nor process waste added by the discharger's operations which are considered to be characteristics of concern to beneficial uses to Alameda Creek when no natural flow occurs.

b. The discharger and Zone 7 of the Alameda County Flood Control and Water Conservation District (Zone 7) are developing a quarry reclamation plan to coordinate, in part, groundwater replenishment activities and surface discharge of excess groundwater that accumulates in quarry pits in the Livermore-Amador Valley. Zone 7 has previously approved temporary dry weather discharges to Arroyo Mocho and Arroyo del Valle from quarry operations containing TDS at ground water concentrations of 450-550 mg/l.

c. The Alameda County Water District (ACWD) has previously accepted effluent limits and discharge conditions for temporary dry weather discharge from quarry operations in order to protect the ACWD's downstream domestic water supply uses. These effluent limits and discharge conditions are contained in these requirements.

d. The discharger has experienced recent high water table conditions necesitating discharge during dry weather months since 1981. These conditions are caused by heavy rainfall, the Zone's groundwater replenishment program, and active quarrying at greater depths. The discharge is necessary because of excessive accumulation of groundwater in the discharger's active quarry pits which interfere with harvesting operations and/or threaten stability of quarry pit levees.

Based on the above information, the discharge as permitted in these requirements does not contain particular characteristics of concern to beneficial uses to the Alameda Creek watershed above Niles when no natural flow occurs and is consistent with the Basin Plan's criteria for compliance with surface water quality objectives for this body of water. Therefore, the discharger is given a waiver from the Basin Plan's dry weather discharge prohibition at this time. Future conditions and/or changes in the discharge may require revision of these requirements including a discharge prohibition.

9. Effluent limitation, toxic effluent standards, established pursuant to Section 301, 304, and 307 of the Clean Water Act and amendments thereto are applicable to the discharge.

10. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U.S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and policies, current plant performance, and best engineering judgment. The limitations are considered to be those attainable by BAT, in the judgment of the Board.

11. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

12. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendtions.

13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Lone Star Industries, Inc., in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The treatment, reuse, or disposal of wastewaters shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The discharge shall not contain silt, sand, clay or other earthen materials from any activity in quantities sufficient to cause deleterious bottom deposits, turbidity, or discolorations in surface waters or to unreasonably affect or threaten to affect beneficial uses.

3. The discharge shall not contain sewage or toxic wastes.

B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

Constituents	Units	30-day Average	Maximum Daily
Total Dissolved Solids	mg/l	500	600
Turbidity	NTU	--	40
Total Settleable Matter	ml/l-hr.	0.1	0.2

2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

3. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY: The survival of test fishes in 96 hour bioassays of the effluent as discharged shall be a median of 90% survival and a 90 percentile value of not less than 70% survival.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

a. Floating, suspended, or deposited macroscopic particulate matter or foam;

b. Bottom deposits or aquatic growths;

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

a.	Dissolved oxygen	5.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concetnration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
b.	pH	Variation from natural ambient pH by more than 0.5 pH units.
c.	Un-ionized ammonia	0.025 mg/l as N Annual Median 0.4 mg/l as N Maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. Wastes from production and processing operations including storm runoff from areas used for loading or washing trucks, shall either be contained on site or routed into the sand and gravel wash water settling ponds.

2. The discharge shall provide the ACWD notice at least 24 hours prior to start-ups and planned shut-downs of discharge to surface streams.

3. Discharges to Shadow Cliffs Reservoir shall be made only upon request of the East Bay Regional Park District.

4. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

   Mass Emission Limit in lbs/day = Concentration limit in mg/l x 8.34 x Actual Flow in mgd averaged over the time interval to which the limit applies.

5. The discharger shall comply with all sections of this order immediately upon adoption.

6. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.

7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except items A.5, A.7, A.9, A.12, A.16, B.2, and B.3.

8. All applications, reports, or information submitted to the Regional Board shall be signed and ceritified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).

9. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a)] the Discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.

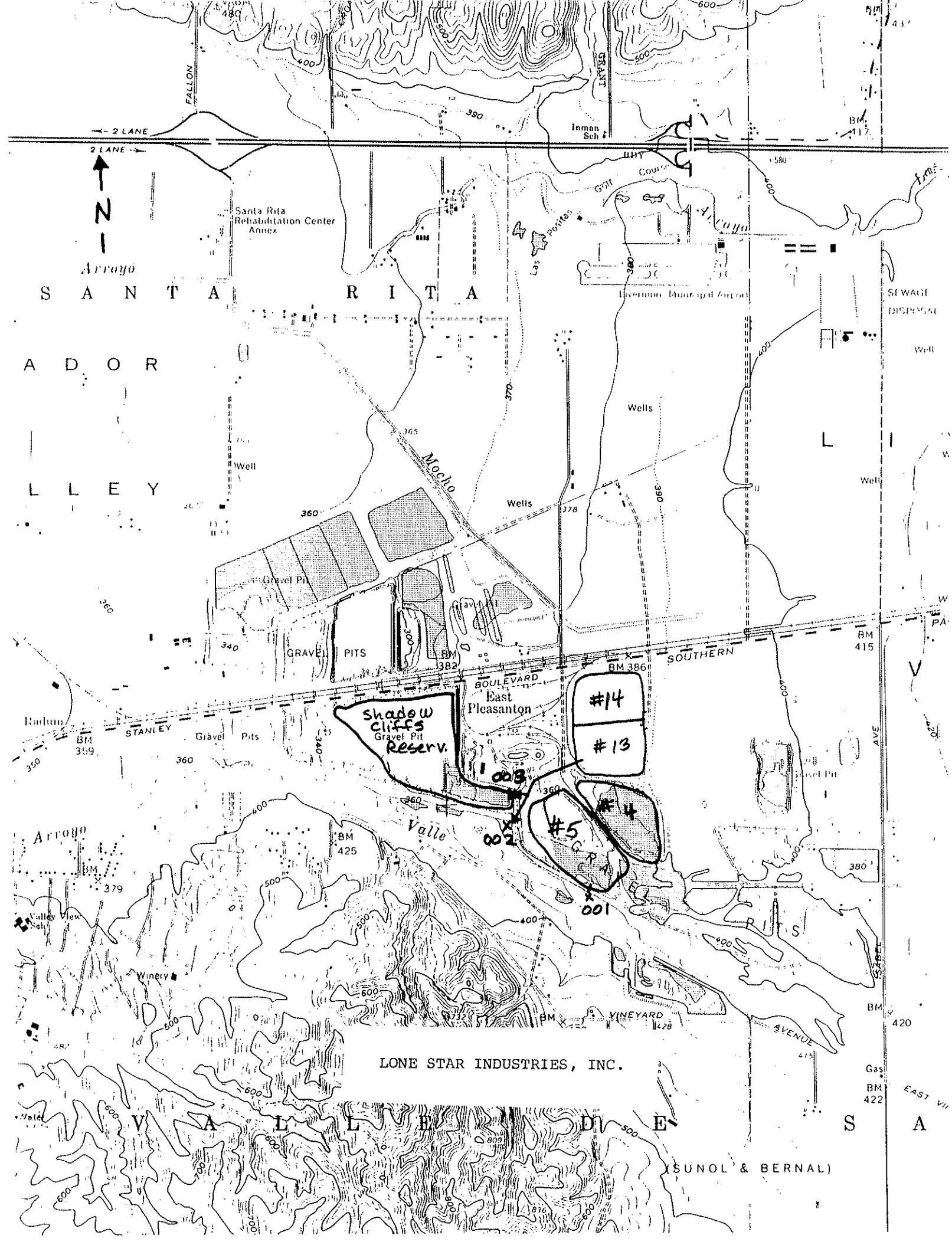
10. This Order expires January 16, 1990. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative code not later than 180 days in advance of such expiration date as application of issuance of new waste discharge requirements.

11. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall be come effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on January 16, 1985.

ROGER B. JAMES
Executive Officer

Attachments:
Map
Standard Provisions & Reporting Requirements, April 1977
Self Monitoring Program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LONE STAR INDUSTRIES, INC.
V A L L E Y
(SUNOL & BERNAL)

CALIFORNIA REGIONAL WATER QUALTIY CONTROL BOARD
SAN FRANCISCO BAY REGION

AMENDED
SELF-MONITORING PROGRAM
FOR

LONE STAR INDUSTRIES, INC.
ELIOT PLANT
PLEASANTON, ALAMEDA COUNTY

NPDES NO. CA0028789

ORDER NO. 85-3

CONSISTS OF

PART A, dated 1/78

AND

PART B, ORDERED January 16, 1985

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

Station	Descriptions
E-1	At any point in the outfall containing waste "001" between the poiint of discharge to Arroyo del Valle and the point at which all waste tributary to that outfall is present.
E-2	At any point in the outfall containing waste "002" between the point of discharge to Arroyo del Valle and the point at which all waste tributary to that outfall is present.
E-3	At any point in the outfall containing waste "003" between the point of discharge to Shadow Cliffs Reservoir and the point at which all waste tributary to that outfall is present.

B. RECEIVING WATERS

Station	Description
C-1	At a point in Arroyo del Valle located 50 feet upstream from Discharge Point 001.
C-2	At a point in Arroyo del Valle located 50 feet downstream from Discharge Point 002.
C-3	At a point in Shadow Cliffs Reservoir located within 25 feet of Discharge Point 003.

II. SCHEDULE OF SAMPLING AND ANALYSES

A. The schedule of sampling and analyses shall be as given in Table I.

B. A map showing the location and identity of each statio sampled shall be submitted with each monitoring report.

III. MODIFICATION OF PART A (dated 1/78)

A. Exclusions: Paragraphs C.3, C.4, C.5.c, C.5.d, C.5.e, D.1, D.4, E.2.c, E.3, E.4, and F.3.e.

B. Modifications:

1. Paragraph E.2.b is modified to state that total waste flow for each discharge point shall be recorded in million gallons per day for each day of discharge during the monitoring period and this data shall be submitted with each monitoring report. If no discharge occurred, the report should state so.

2. Paragraph F.3 is modified to state that if no discharge occurred during the monthly reporting period, a letter certifying this shall be submitted.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-3.

2. Was adopted by the board on January 16, 1985.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

ROGER B. JAMES
Executive Officer

Attachment:
Table I

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

CA0028789

Sampling Station	E-1,E-2,E-3			C-1[a]		C-2[a]		C-3			
Type of Sample	C-24	G	O	G	O	G	O	G	O		
Flow Rate (mgd)	D										
Settleable Matter (mg/l & lbs/day)		W									
Fish Toxicity, 96-hr. TL-50 % Survival in undiluted waste		2/Y									
Turbidity (Nephelometric Turbidity Units)		W		W		W		Y			
pH (units)		W		W							
Dissolved Oxygen (mg/l & %Saturation)		M									
Temperature (° F)		M									
Total Dissolved Solids (mg/l & lbs/day)		M		M							
All Applicable Standard Observations			D		D		D		D		

TYPES OF SAMPLES

G = grab sample
C-24 = composite - 24-hour
O = observation

TYPES OF STATIONS

E = waste effluent stations
C = receiving water stations

FREQUENCY OF SAMPLING

D = daily when discharging
W = once per week during each week in which discharge occurs
M = once per month during each month in which discharge occurs
Y = once per year during each year in which discharge occurs
2/Y = twice per year, during each spring (March-May) and fall (September-November) period in which discharge occurs

Footnote (a) = C stations shall be sampled only when the discharge reaches naturally-occurring surface flow at the station.